

REMARKS/ARGUMENTS

Claims 1-8, 10-48, 50, 51 and 53-55 are pending in the application. The Examiner has allowed claims 37-48, 50, 51 and 53. The Examiner has rejected claims 1-3, 5, 6, 10-14, 19, 23-33, 35, and 54 and 55. The Examiner has objected to claims 4, 7, 8, 15-18, 20-22, 34 and 36. Applicant has cancelled claims 9, 49 and 52. Applicant respectfully requests reconsideration of pending claims 1-8, 10-48, 50, 51 and 53-55.

The Examiner has rejected claim 55 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,978,398, issued to Harper et al. Applicant respectfully disagrees.

Regarding claim 55, Applicant notes the Examiner persists with the rejection of claim 55 originally made in the first Office action. In the Examiner's Response to Arguments in the final Office action, the Examiner merely stated, "In response to applicant's argument pertaining to claims 45-48, 50, 52, and 55 (see page 20-22), arguments are similar to ones stated above and as such, are rejected for reasons stated above." While the Examiner does not specify which of the "reasons stated above" the Examiner refers to, Applicant presumes the Examiner refers to the Examiner's response to Applicant's arguments concerning claim 19, where the Examiner states, "Harper discloses, as stated above, when a failure is imminent, the primary node (or protected system element) is commanded to beginning mirror its dynamic state updates to the secondary node (protection system element) (see column 6 lines 13-17), indicating the claim limitations. Argument is moot. Examiner maintains his rejection." However, Applicant submits column 6, lines 13-17, of the Harper '398 reference, which states, "In step 450, the primary node 301A is commanded to begin mirroring its dynamic state updates to the secondary node 301B as they occur, in an attempt to get the secondary node's state completely up to date. Once again, it is noted that the system is fully operational during this process," fails to disclose, as one example, "confirming failure of the first failure predicted one of said protected system elements" of claim 19 and "confirming failure of the failure predicted one of said protected system elements" of claim 55. Thus, Applicant submits claim 55 is in condition for allowance.

The Examiner has rejected claims 1-3, 5, 6, 10, 12-14, 19, 23, 27, 29-33, 35, and 54 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,978,398, issued to Harper et al in view of U.S. Patent No. 4,769,761 of Downes et al. Applicant respectfully disagrees.

Regarding claim 1, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 1. As an example, Applicant submits the cited portions of the cited references fail to disclose or suggest "wherein identifying the failure predicted one of said protected system elements includes assessing performance of said protected system elements based at least partially on an element demerit point level of each one of said protected system elements." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference, Applicant notes such portion merely recites "U.S. Pat. No. 4,339,657 describes a technique for error logging by integrating error counts over a selected number of operations and comparing the results with a criterion. An exception is logged if the number of errors exceeds the criterion, but the exception log is cleared if the number of errors is less than the criterion." Applicant submits the cited portions of the cited reference fail to teach or suggest applying the "technique for error logging" mentioned in the Downes reference to "...each one of said protected system elements." Moreover, Applicant submits the cited portion of the cited reference appears to teach away from such modification, as Applicant submits the "technique for error logging" appears to discard its "exception log" when "the exception log is cleared."

As another example, Applicant submits the cited portions of the cited references fail to disclose or suggest "identifying a failure predicted one of a plurality of protected system elements." While the Examiner cites "(see column 2 lines 19-23)" and "(see column 4 lines 23-27)," Applicant submits such portions merely recite "...monitoring the primary node of the computer system..." and "...determining whether the primary node is failing or about to fail...," not "...a plurality of protected system elements." Thus, Applicant submits claim 1 is in condition for allowance.

Regarding Claim 2, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 2. As an example, Applicant submits the cited portions of the cited references fail to disclose or suggest "wherein identifying the failure predicted one of said protected system elements includes assessing at least one of a plurality of failure prediction parameters of said protected system elements for determining when a failure prediction condition has been met by one of said protected system elements." While the Examiner cites "(see column 9 lines 15-20 of incorporated by reference Harper '266)," Applicant notes such portions merely recites "In single parameter monitoring, a rejuvenation agent monitors a small set of parameters and triggers rejuvenation when one or more of them approaches a predefined resource exhaustion threshold or characteristic hazardous value. This is effective for scenarios where a small number of primary indicators are found which reliably indicate resource exhaustion." Applicant submits such "monitoring" does not disclose or

suggest "...identifying the failure predicted one of said protected system elements..." as Applicant sees no teaching or suggestion as to "...said protected system elements." Thus, Applicant submits claim 2 is in condition for allowance.

Regarding Claim 3, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 3. As an example, Applicant submits the cited portions of the cited references fail to disclose or suggest " While the Examiner cites "(see column 9 lines 15-20 of incorporated by reference Harper '266)," Applicant submits the cited portion of the cited reference fails to disclose or suggest "...wherein identifying the failure predicted one of said protected system elements includes..." as Applicant sees no teaching or suggestion as to "...said protected system elements...." Thus, Applicant submits claim 3 is in condition for allowance.

Regarding Claim 5, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 5. As one example, Applicant submits the cited portions of the cited references fail to disclose or suggest "wherein the monitoring the failure prediction parameter further comprises bridging the protection system element across the at least one of the plurality of the protected system elements." While the Examiner cites "(see column 6 lines 13-17)," Applicant submits such portion of the cited reference recites "...dynamic system updates..." which Applicant submits does not teach or suggest "...the monitoring the failure prediction parameter further comprising...." Thus, Applicant submits claim 5 is in condition for allowance.

Regarding Claim 6, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 6. As one example, Applicant submits the cited portions of the cited references fail to disclose or suggest "...wherein the monitoring the failure prediction parameter further comprises sequentially bridging the protection system element across each of the plurality of the protected system elements." While the Examiner cites "(see column 4 lines 23-27 and column 6 lines 13-17)," Applicant submits the cited portions of the cited reference do not disclose or suggest, for example, "...sequentially bridging..." or "...across each of the plurality of protected system elements." Thus, Applicant submits claim 6 is in condition for allowance.

Regarding Claim 10, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 10. Applicant has presented arguments for the allowability of claim 1, from which claim 10 depends. Thus, Applicant submits claim 10 is in condition for allowance.

Regarding Claim 12, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 12. As an example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein the element demerit point level corresponds to a quantity of element demerit points accumulated over a designated period of time." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference, Applicant submits the cited portion of the cited reference fails to disclose or suggest, for example, "...over a designated period of time." Thus, Applicant submits claim 12 is in condition for allowance.

Regarding Claim 13, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 13. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes determining that a rate of change of element demerit points for one of said protected system elements has exceeded a predetermined element demerit point rate of change threshold limit." While the Examiner cites "(see column 1 lines 60-65)" of the Downes reference, Applicant submits the cited portion of the cited reference teaches away from the subject matter of claim 13. While claim 13 recites "...a rate of change of element demerit points...," Applicant notes the cited portion of the cited reference recites "...integrating error counts...." Thus, Applicant submits claim 13 is in condition for allowance.

Regarding Claim 14, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 14. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter corresponding to a service agreement parameter for one of said protected system elements has declined to a predetermined minimal acceptable service agreement parameter level." While the Examiner cites "(see column 9 lines 10-15 and column 10 lines 12-15 of incorporated by reference Harper '266)," Applicant notes "column 10 lines 12-15" of the Harper '266 reference describe "paging traffic quiesces and CPU utilization falls to zero," neither of which Applicant considers to disclose "...a failure prediction parameter corresponding to a service agreement parameter for one of said protected system elements has declined to a predetermined minimal acceptable service agreement parameter level." Thus, Applicant submits claim 14 is in condition for allowance.

Regarding Claim 19, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 19. As one example, Applicant submits the cited portions of the

cited references fail to teach or suggest "downloading service information of the failure predicted one of said protected system elements to the protection system element after identifying the failure predicted one of said protected system elements." As Applicant noted with respect to claim 1, from which claim 19 depends, Applicant submits the cited portion of the cited reference fails to teach or suggest "identifying a failure predicted one of a plurality of protected system elements." Thus, Applicant submits claim 19 is in condition for allowance.

Regarding Claim 23, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 23. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein the protection system element provides protection switching functionality exclusively for all of said protected system elements." While the Examiner cites "(see column 6 lines 35-40)" of the Harper '398 reference, Applicant notes col. 6, lines 21-25, of the cited reference states, "...at which time the secondary node becomes the primary node, and the primary node is rebooted and subsequently becomes the secondary node." Applicant submits such teaching teaches away from the subject matter of claim 23. Thus, Applicant submits claim 23 is in condition for allowance.

Regarding Claim 27, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 27. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes determining that a failure prediction parameter associated with the failure predicted one of said protected system elements has exceeded a failure prediction parameter first threshold limit." While the Examiner cites "(see column 9 lines 6-10 and 25-28 of incorporated by reference Harper '266)," Applicant notes col. 9, lines 25-28, of the Harper '266 reference states "FIG. 7 illustrates, for example, the growth in consumption over time of a typical resource (e.g., non-paged pool bytes), toward an upper limit." Applicant submits the cited portion of the cited reference fails to disclose "...has exceeded a failure prediction parameter first threshold limit." Thus, Applicant submits claim 27 is in condition for allowance.

Regarding Claim 29, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 29. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein the protection system element provides protection switching functionality exclusively for all of said protected system elements." While the Examiner cites "(see column 6 lines 35-37)" of the Harper '398 reference, Applicant submits col. 6, lines 21-25,

of the cited reference states, "...at which time the secondary node becomes the primary node, and the primary node is rebooted and subsequently becomes the secondary node." Applicant submits such teaching teaches away from the subject matter of claim 29. Thus, Applicant submits claim 29 is in condition for allowance.

Regarding Claim 30, Applicant has submitted arguments for the allowability of claim 1, from which claim 30 depends. Thus, Applicant submits claim 30 is also in condition for allowance.

Regarding Claim 31, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 31. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...specifying failure prediction criterion for each of said protected system elements." While the Examiner cites "(see column 9 lines 7-14 of incorporated by reference Harper '266)," Applicant submits such portion of such reference fails to disclose or suggest, for example, "...for each of said protected system elements." Thus, Applicant submits claim 31 is in condition for allowance.

Regarding Claim 32, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 32. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein specifying said failure prediction criterion includes specifying a first type of failure prediction criterion for a first portion of said protected system elements and a second type of failure prediction criterion for a second portion of said protected system elements." While the Examiner cites "(see column 9 lines 6-10 of incorporated by reference Harper '266)," Applicant submits the cited portion of the cited reference does not teach or suggest, for example, "...a first portion of said protected system elements..." and "...a second portion of said protected system elements." Thus, Applicant submits claim 32 is in condition for allowance.

Regarding Claim 33, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 33. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein specifying said failure prediction criterion includes specifying said failure prediction criterion on a per protected system element basis." While the Examiner cites "(see column 4 lines 10-15 and column 6 lines 32-37 and column 9, lines 7-14 of Harper '266)," Applicant submits the cited portions of the cited reference fail to teach or suggest, for example, "...specifying said failure prediction criterion...." Thus, Applicant submits claim 33 is in condition for allowance.

Regarding Claim 35, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 35. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "...wherein identifying the failure predicted one of said protected system elements includes assessing a protection switching operation initiation notification issued via a system administrator user interface." While the Examiner cites, "see column 4 lines 20-22 of incorporated by reference Harper '266)," Applicant submit the cited portion of the cited reference recites "...the system operator can...initiate a graceful planned outage..." which Applicant submits fails to teach or suggest the subject matter of claim 35. Thus, Applicant submits claim 35 is in condition for allowance.

Regarding Claim 54, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 54. As one example, Applicant submits the cited portions of the cited references fail to teach or suggest "identifying a failure predicted one of a plurality of protected system elements." While the Examiner cites, "(see column 2 lines 19-23)" and "(see column 4 lines 23-27)" of the Harper '398 reference, Applicant submits the cited portions of the cited reference recite "In a third aspect, a method (and system) of maintaining performance of a primary node in a computer system, includes monitoring the primary node of the computer system, determining whether the primary node is failing or about to fail, and migrating the state of the primary node to..." and "Indeed, in a cluster system having more than two nodes, the secondary node 101B may not know which primary node 101A is going to fail until the failure is predicted, so it cannot have the primary node's application already running." As another example, Applicant submits such portion of such reference fails to teach or suggest, for example, "a plurality of protected system elements." Rather, Applicant submits col. 2, lines 19-23, of the cited reference, as cited by the Examiner, appears to describe merely "...monitoring the primary node..., determining whether the primary node is failing or is about to fail...." Thus, Applicant submits claim 54 is in condition for allowance.

The Examiner has rejected claims 11,24,25,26, and 28 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,978,398 of Harper '398 (which incorporates by reference Harper '398 '266) in view of U.S. Patent No. 4,769,761 of Downes and in further view of U.S. Patent No.6, 771,440 of Smith.

Regarding Claim 11, Applicant submits the cited portions of the cited references fail to render obvious the subject matter of claim 11. As one example, Applicant submits the cited references fail to teach or suggest "...wherein the predetermined element demerit point threshold limit is associated with

a first level of failure probability, lower than an element demerit point threshold limit corresponding to a next higher level of failure probability." While the Examiner cites, "(see column 6 lines 6-20)" of the Smith reference, Applicant submits the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant notes the Examiner cited the Smith reference on the Form PTO-892 enclosed with the first Office action, where the Examiner characterized claim 11 as "Allowable Subject Matter" and stated claim 11 was "objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Applicant notes MPEP § 706.04 "Rejection of Previously Allowed Claims" states as follows:

A claim noted as allowable shall thereafter be rejected only after the proposed rejection has been submitted to the primary examiner for consideration of all the facts and approval of the proposed action.

Great care should be exercised in authorizing such a rejection. See *Ex parte Grier*, 1923 C.D. 27, 309 O.G. 223 (Comm'r Pat. 1923); *Ex parte Hay*, 1909 C.D. 18, 139 O.G. 197 (Comm'r Pat. 1909).

Accordingly, Applicant submits the Examiner's rejection appears to be inconsistent with MPEP § 706.04. Furthermore, Applicant has presented arguments for the allowability of claims 1, from which claim 11 depends. Thus, Applicant submits claim 11 is in condition for allowance.

As to claim 24, Applicant notes the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant has presented arguments for the allowability of claims 1 and 19, from which claim 24 depends. Thus, Applicant submits claim 24 is also in condition for allowance.

As to claim 25, Applicant notes the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant has presented arguments for the allowability of claims 1 and 19, from which claim 25 indirectly depends. Thus, Applicant submits claim 25 is also in condition for allowance.

As to claim 26, Applicant notes the Smith reference pertains to adaptive event-based predictive analysis measurements in a hard disk drive. Accordingly, Applicant submits the Smith reference is non-analogous art. Moreover, Applicant has presented arguments for the allowability of claims 1 and

19, from which claim 26 depends. Thus, Applicant submits claim 26 is also in condition for allowance.

As to claim 28, the Examiner states, "Smith discloses a system wherein a first threshold triggers a predictive failure analysis and a second threshold greater than the first threshold signifies a failure (see column 6 lines 6-20)." However, Applicant submits such alleged teaching does not describe "...implementing said protection switching operation...." Thus, Applicant submits claim 28 is in condition for allowance.

The Examiner states claims 37-48, 50, 51 and 53 are allowable. The Examiner has objected to claims 4, 7, 8, 15-18, 20-22, 34, and 36 as being dependent upon a rejected base claim, but states they would be allowable if rewritten in independent form. Applicant has presented arguments for the allowability of claims from which claims 4, 7, 8, 15-18, 20-22, 34, and 36 depend. Thus, Applicant submits claims 4, 7, 8, 15-18, 20-22, 34, and 36 are also in condition for allowance.

In conclusion, Applicant has overcome all of the Office's rejections, and early notice of allowance to this effect is earnestly solicited. If, for any reason, the Office is unable to allow the Application on the next Office Action, and believes a telephone interview would be helpful, the Examiner is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

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Date



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